

Work Order ID 60594

Page 1

Thursday, July 15, 2010 10:19:21 AM

Item ID: D206-642-341

Accept



Setup Start



Revision ID:

Item Name: Replacement Skidtube

Stop



Start Date: 7/15/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 7/22/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:



Date: 10-7-15 Tooling:

Date:

Run Start



QC:

Date: SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2650	F								

100		0.00							
DC	DOCUMENT CONTROL								
Document Control	Memo	0.00							

Photocopy bluefile and create labels per PPP D206-642-341 CHG003

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

110

Operation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Skidtubes

Skidtubes

Skidtubes

0.00

Memo

0.00

1-Deburr Fwd edge of tube

2-Remove ridge on inside of Fwd edge of tubeas per Dwg D2650

3-Weld Fwd Cap as per Dwg D2650. Use aluminum rod. Grind D2647 to fit as required.

A/R Aluminum Rod *M112507 BE 10/07/19*

4-Grind weld flush to cap on top surface only.

BE 10/07/19

5-Cut aft end to lenght as per dwg D2650

6-Drill pilot holes using drill Jig DT8168A (A,& B) and DT8025. Open to Ø 0.312"

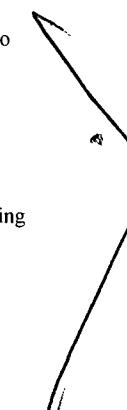
7-Drill holes for wearplates using DT 8028-5. Open to Ø 0.297".

8-Open Aft Cap Hole using #6 Drill Bit

9-Open holes for Tow Ring to Ø0.625" as per Dwg D2650, D2650-5 Drilling Detail

10-Remove inner indexing ridge on aft end of skidtubeas per Dwg D2650

11-Deburr and Blow out all chips form inside the tube




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Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

115



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

S1067120

120



HandFinish

Hand Finishing

Chemical Conversion Coat per QSI005 4.1

0.00

1 10/7/21

Memo

0.00

125



QC

Quality Control

QC3- Inspect Part Finish

0.00

S1067121

Memo

0.00

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130



Skidtubes

Memo

0.00

BE 10/7/24

Skidtubes

1-Open holes to finished size as per Dwg D2650, D2650-5 Drilling Detail
(without cutting fluid)

2-Countersink crossbolt spacer holes as per Dwg D2650 (without cutting fluid)

3-Deburr. Blow out chips. Grind alodine off around crossbolt spacer.

4-Bond D2654-5 web in place as per QSI 015 Ensure holes line up Allow 12 Hrs.
cure time before cutting Start Date: 10-7-21 Time: 2:15 Finish Date: 10/7/22 Time: 8:40 AM A/R Sikaflex-291 M 1135/9 Sikaflex expiry date: 10-11-30

140



QC5- Inspect part completeness to step on W/O

0.00

S1014172

QC

Memo

0.00

Quality Control

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150



Skidtubes

0.00

Skidtubes

Memo

0.00

1-Prep per QSI 005 and Insert cross bolt spacers D2649. Weld as per QSI 004 and Dwg D2650. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod.

A/R Aluminum Rod *M112507*
BE 10/07/26

2-Grind welds flush as per Dwg D2650. Masking Tape access to inside of the Skidtube

3-Counterbore 5/16" x 0.750" deep as per Dwg D2650Deburr

4- Install nut plate as per dwg

DP 10-7-27

170



QC10- Inspect visual per QSI004- ground welds

0.00

QC

Memo

0.00

Quality Control

S 007b2
60

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

180



QC5- Inspect part completeness to step on W/O

0.00

S.olarb2

QC

Quality Control

190



Pressure Wash per QSI005 4.3

0.00

HandFinish

Memo

0.00

Hand Finishing

Brush alodine tube on crossbolt spacer area, do not acid etch, do not dip tube in tank.

1 BK 10-7-27

200



White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

Powdercoat

Memo

0.00

Powder Coating

START TIME: 8:50

OVEN TEMPERATURE: 320

FINISH TIME: 9:20

1 BK 10-7-28.

W/O:		WORK ORDER CHANGES					
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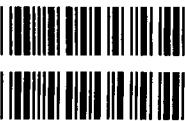
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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

210



QC

Quality Control

Operation
Description

QC3- Inspect Part Finish

Set Up/
Run Hours

0.00

=> MU

Tool ID

10102112

Tool #

Plan
CodeAccept
Qty

1

Reject
Qty

0

Reject
NumberReject
NumberInsp.
Stamp

Memo

0.00

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

220



HandFinish

Operation
Description

HandFinishing

Set Up/
Run Hours

0.00

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Hand Finishing

Memo

0.00

=> M

10/08/13

XL

O

1-Install inserts & wearpads as per dwg D2922. Use a drop of Sikaflex inside
insert holes before installing wearpad/wearplate.A/R Sikaflex-291 11/15/10
Sikaflex expiry date: 11/01✓ 2-Install O-Rings D2651-3 on plugs D2651-1 with Petroleum Jelly and install
plugs as per Dwg D2650. Clean excess adhesive

✓ 3-Install MS27039-4-06 Screw as per DEO 9153

✓ 4-Inspect for foreign object per QSI 024

5-Install D2646 Aft Cap and seal with SikaflexClean excess adhesive

A/R Sikaflex-291 11/15/10
Sikaflex expiry date: 11/01✓ 6-Wing Walk as per Dwg D2650-5 and QSI 005 4.4 Batch: A115028

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Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

230



QC

Quality Control

QC3- Inspect Part Finish

0.00

S. dolan/3

0.00

240



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

S. dolan/3

0.00

250



Packaging

Packaging

0.00

Packaging

Memo

0.00

Identify and pack for shipping as per PPP D206-642-341
Location: PPC 64908
PPP Rev: 64908

4

W/O:		WORK ORDER CHANGES					
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Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept

Reject

Reject

Insp.

Stamp

260



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

10/08/26
MF
10-8-26

W/O:		WORK ORDER CHANGES					
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Picklist Print

Thursday, July 15, 2010 10:19:25 AM

Page 1

Work Order ID: 60594



Parent Item: D206-642-341



Parent Item Name: Replacement Skidtube

Start Date: 7/15/2010

Required Date: 7/22/2010

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev: H 05.10.11 Added D3429-1 per CHG004 KJ/CP/JLM

IPP Rev:I 08-09-29 revF as per dwg DD verified by:EC Est Rev:J 09-03-02 as per DSI9440 rev.a DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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AN960JD416	NAS1149D0463J	Purchased	No				Each	0.0000	1	1			
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Washer				MA 115000							x1	41	10/08/12
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CCR264SS3-3		Purchased	No				Each	540.0000	2	2			
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Cherry Rivet													
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Location	Loc Qty	Loc Code
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ST311	540	
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112314	4	
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113539	60	
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113973	476	
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	Each	
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	3,739.000	
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	2	2
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CR3212-4-03	Purchased	No											
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Cherry Rivet													
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Location	Loc Qty	Loc Code
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ST311	3739	
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111359	5	
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112314	30	
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114436	1142	
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114450	564	
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114859	1998	
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Parent Item: D206-642-341



Parent Item Name: Replacement Skidtube

Start Date: 7/15/2010

Required Date: 7/22/2010

Start Qty: 1.00

Required Qty: 1.00

D2620



Manufactured No

Each

12.0000



1 1

Skidtube, 206 Skidtube

Location

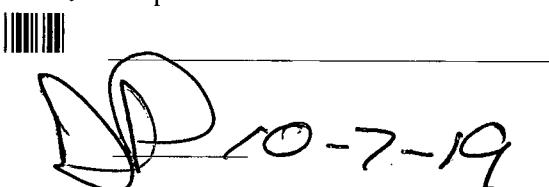
LG



Loc Qty

12
2
10

Loc Code



D2647



Manufactured No

Each

80.0000



1 1

Cap

Location

FP



Loc Qty

80
80

Loc Code



D2649



Manufactured No

Each

69.0000



19 19

Cross Bolt Spacer

Location

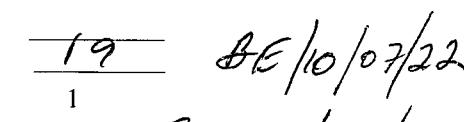
LG



Loc Qty

69
69

Loc Code



D2654-5



Manufactured No

Each

0.0000



1 1

Web

D2680-041



Manufactured No

Each

43.0000

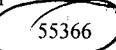


1 1

Nut Plate

Location

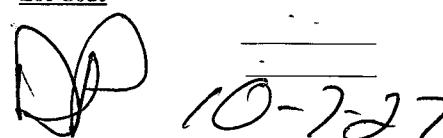
ST021



Loc Qty

43
43

Loc Code



W/O:		WORK ORDER CHANGES					
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Start Date: 7/15/2010

Required Date: 7/22/2010

Start Qty: 1.00

Required Qty: 1.00

ALS4-1032-130

Purchased

No

220

Each

4,506.000

54

54



Insert

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

PKG11	4190	
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114723

4190

x54 40 10/08/12

ST282	277	
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110511

38

114407	239	
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114654

39

ST381	39	
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114654

39

AN960C10L

NAS1149C0332

Purchased

No

220

Each

0.0000

54

54



washer

11115000

x54 40 10/08/12

AN960JD10L

NAS1149D0332J

Purchased

No

220

Each

3,181.000

2

2



Washer

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
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ST348	3181	
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110985

3181

x2 40 10/08/12

D2646

Manufactured

No

220

Each

94.0000

1

1



Aft Cap

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP-4	85	
------	----	--

57332

85

x1 40 10/08/12

FP6	9	
-----	---	--

52663

9

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, July 15, 2010 10:19:25 AM

Page 4

Work Order ID: 60594



Parent Item: D206-642-341



Parent Item Name: Replacement Skidtube

Start Date: 7/15/2010

Required Date: 7/22/2010

Start Qty: 1.00

Required Qty: 1.00

D2651-1



Manufactured No

220

Each

804.0000

14

14



Plug

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP	208	
----	-----	--

51530

fp	208	
----	-----	--

596

53349	411	
-------	-----	--

57869

	185	
--	-----	--

x14

14

W14 10108112

D2651-3



Manufactured No

220

Each

412.0000

14



O-Ring

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP	412	
----	-----	--

46114

	412	
--	-----	--

x14

1

W14 10108112

D3535-11



Manufactured No

220

Each

11.0000

1



Wearshoe

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP019	11	
-------	----	--

57261

	11	
--	----	--

x14

1

W14 10108112

D3535-23



Manufactured No

220

Each

5.0000

1



Wearshoe

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP21	5	
------	---	--

57730

	5	
--	---	--

x14

1

W14 10108112

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, July 15, 2010 10:19:25 AM

Page 5

Work Order ID: 60594



Parent Item: D206-642-341



Parent Item Name: Replacement Skidtube

Start Date: 7/15/2010

Required Date: 7/22/2010

Start Qty: 1.00

Required Qty: 1.00

D3535-35



Manufactured No

220 Each 7.0000



Wearshoe

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP018	7	
59237	7	

x1 u 10/08/12

D3536-11



Manufactured No

220 Each 19.0000



Gasket

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP011	12	
57867	12	
ST497A	7	
46649	3	
46715	4	

x1 u 10/08/12

D3536-23



Manufactured No

220 Each 6.0000



Gasket

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP011	6	
58819	6	

x1 u 10/08/12

D3536-35



Manufactured No

220 Each 11.0000



Gasket

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP012	11	
58683	11	

x1 u 10/08/12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, July 15, 2010 10:19:25 AM

Page 6

Work Order ID: 60594



Parent Item: D206-642-341



Parent Item Name: Replacement Skidtube

Start Date: 7/15/2010

Required Date: 7/22/2010

Start Qty: 1.00

Required Qty: 1.00

D3537-1



Manufactured

No

220

Each

44.0000

6

6



Wearpad

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP	1	
55465	1	
FP17	43	B 60192
57713	3	
59593	40	

D3537-3



Manufactured

No

220

Each

20.0000

1



Wearpad

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP17	4	
57512	4	
FP19	16	
59711	16	

MS27039-1-08



Purchased

No

220

Each

2,075.000

56



Screw Replace with

MS27039C1-08

M 115336

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST291	2075	
110835	875	
114718	200	
115108	1000	

MS27039-4-06



Purchased

No

220

Each

28.0000

1



Screw

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST292	28	
109061	28	

X1 10 108112

W/O: 60594		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
10.07.20 220		USE MS27039C1-08 /M19185 INSTEAD OF MS27039-1-08			JP	10.07.20	56	JP 10.07.20 051042	

REFERENCE ONLY

Part No: D206-642-341 PAR #: Fault Category: NCR: Yes No DQA: Date:
 Resolution: Disposition: QA: N/C Closed: Date:

NCR: 60594		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector	
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				
10.07.20 220		IPP CALLS FOR MS27039-1-08 IN CALLS FOR MS27039C1-08	JP	UPDATE IPP TO CALL FOR MS27039C1-08			JP 10.07.20 051042		

REFERENCE ONLY

Initial all entries

8 7 6 5 4 3 2 1

QTY -1	QTY -3	QTY -5	QTY -7	PART NUMBER	DESCRIPTION
X				D2650-1	SKIDTUBE ASSEMBLY
	X			D2650-3	SKIDTUBE ASSEMBLY
		X		D2650-5	SKIDTUBE ASSEMBLY
			X	D2650-7	SKIDTUBE ASSEMBLY
1	1	1	1	D2600-1-160	EXTRUSION
1				D2654-1	WEB
1				D2654-3	WEB
	1			D2654-5	WEB
		1		D2654-7	WEB
1	1	1	1	D2646	AFT CAP
1	1	1	1	D2647	CAP
17	18	19	23	D2649	CROSS BOLT SPACER
16	18	14	22	D2651-1	PLUG
16	18	14	22	D2651-3	O-RING
1	1	1	1	D2680-041	NUT PLATE
2	2			D3286-1	DOUBLER
2	2			D3286-3	STUD
42	44	54	60	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, ALS7-1032-130)
2	2	2	2	AN960JD10L	WASHER
2	2	2	2	CCR264SS3-3	RIVET
2	2	2	2	CR3212-4-03	RIVET
2	2	2	2	MS27039-1-08	SCREW
1	1	1	1	MS27039-4-06	SCREW
1	1	1	1	AN960JD416	WASHER
52	52			CR3212-4-04	RIVET

F

SHOP COPY

RETURN TO

ENGINEERING

UNCONTROLLED COPY

SUBJECT TO AMENDMENT

WITHOUT NOTICE

WORK ORDER

NO. 100594

BD 10-7-15

RELEASED
08-27-23

F

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
-BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A
- 8) WELD PER DART QSI 004
- 9) DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 10) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- 11) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)
- 12) DRILL Ø0.297 FOR ALS7-1032-130 INSERTS USING TEMPLATE DT8056-1 ON -1 TUBE, DT8056-3 ON -3 TUBE, DT8056-5 ON -5 TUBE, AND DT8056-7 ON -7 TUBE. INSTALL INSERTS AFTER FINISH.
- 13) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

F	DRAWING UPDATED TO CURRENT STANDARDS. SHT 6 ADDED. ALL SECTION AND DETAIL VIEWS TRANSFERRED TO SHT 6. SHT 1 IN PL PART D2649 QTY UPDATED. SHT 6 SECT C-C GRIND INSTRUCTIONS DELETED FROM NOTE 7 (SEE NCR 239).	AJS	08.08.08
E	RMOVE CBORE, CHG DRILL, ADD CHAMFER	CP	06.03.30
D	REDRAW; INCCR. DEO9136/9153/9163 MOD GROUND HANDLING ON D2650-1/-3	CP	04.05.17
C	CHANGE HOLE PATTERN AND FRONT END	DS	97.10.29
B	AS MANUFACTURED CHANGES	DS	97.06.26
A	NEW ISSUE	DS	97.03.25
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		REV. F	
MFG. APPR.		D2650	SHEET 1 OF 6
APPROVED		TITLE	SCALE
DE APPR.		206/407 SKIDTUBE ASSEMBLIES	NTS
DATE	08.08.08	COPRIGHT © 1997 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS PROVIDED OR FOR ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC	

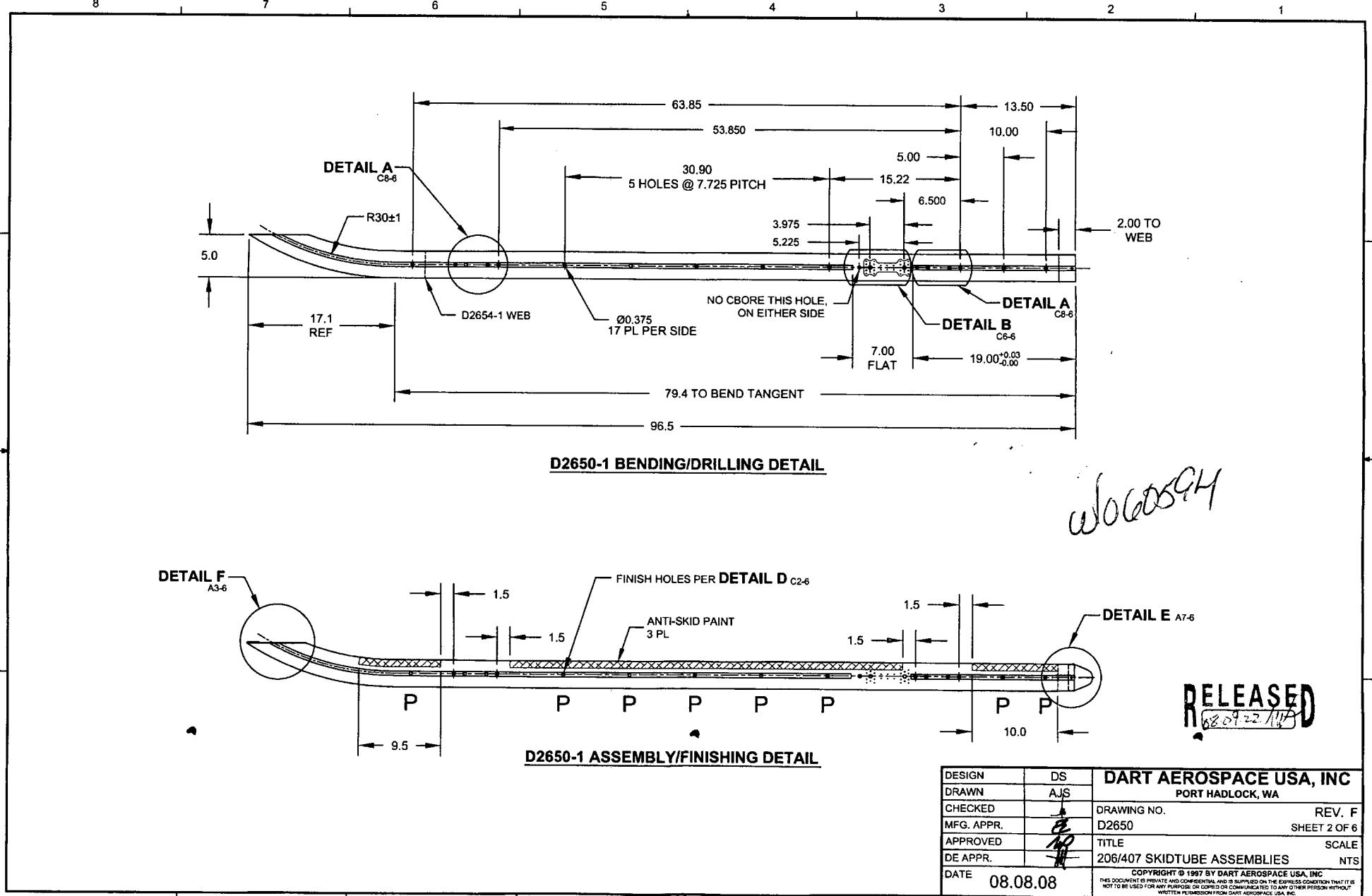
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



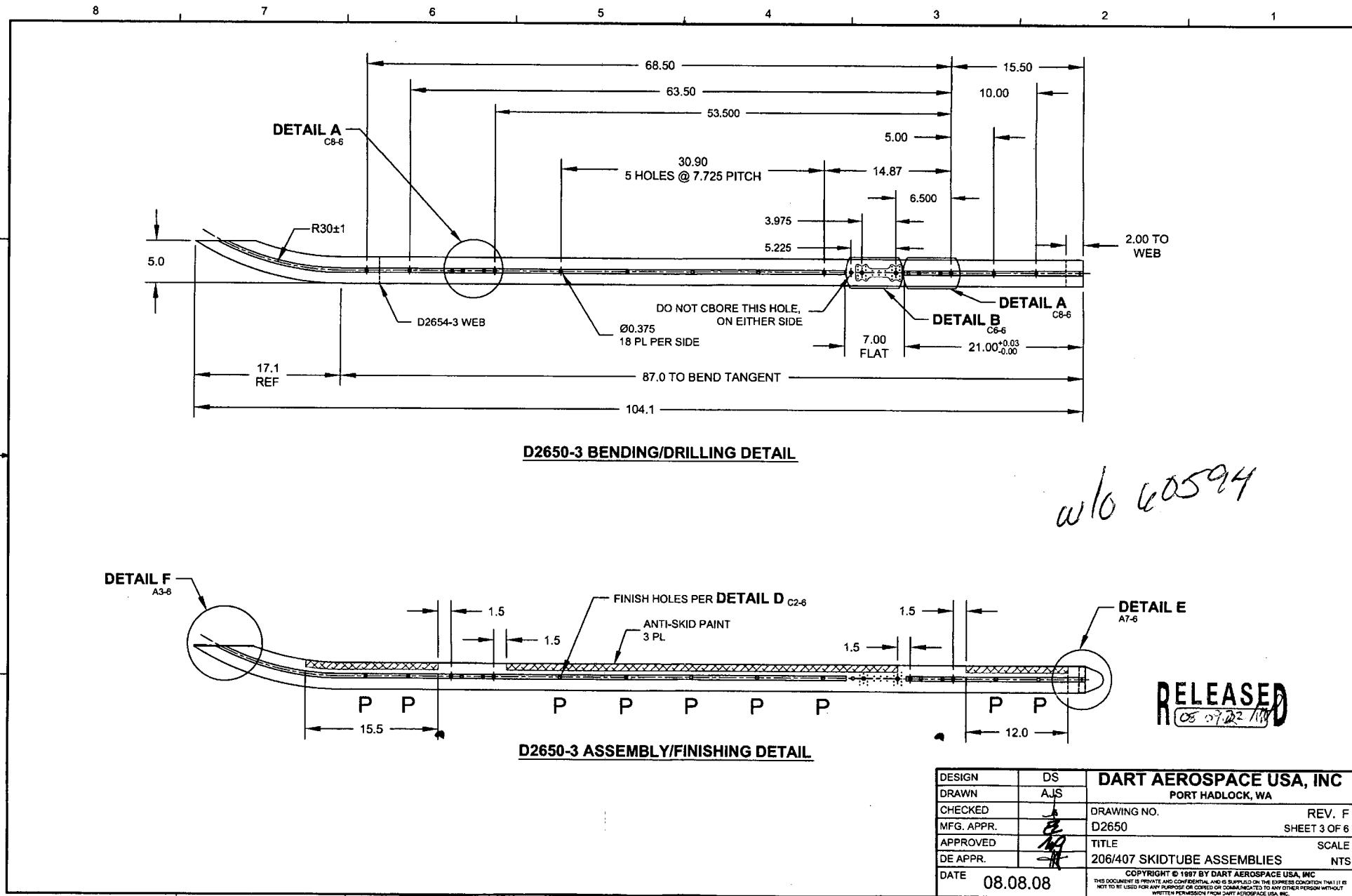
W/O:		WORK ORDER CHANGES					
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



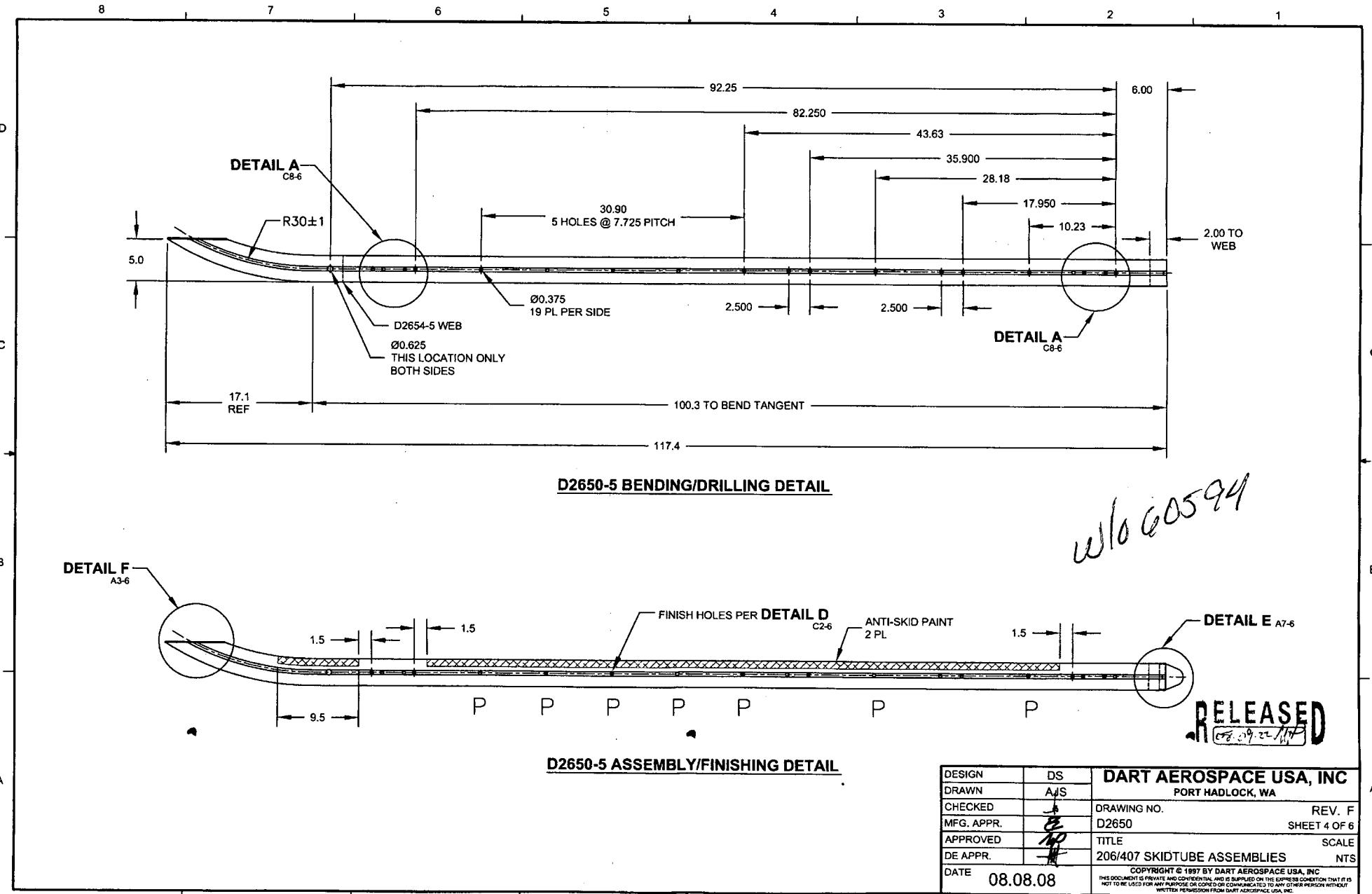
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



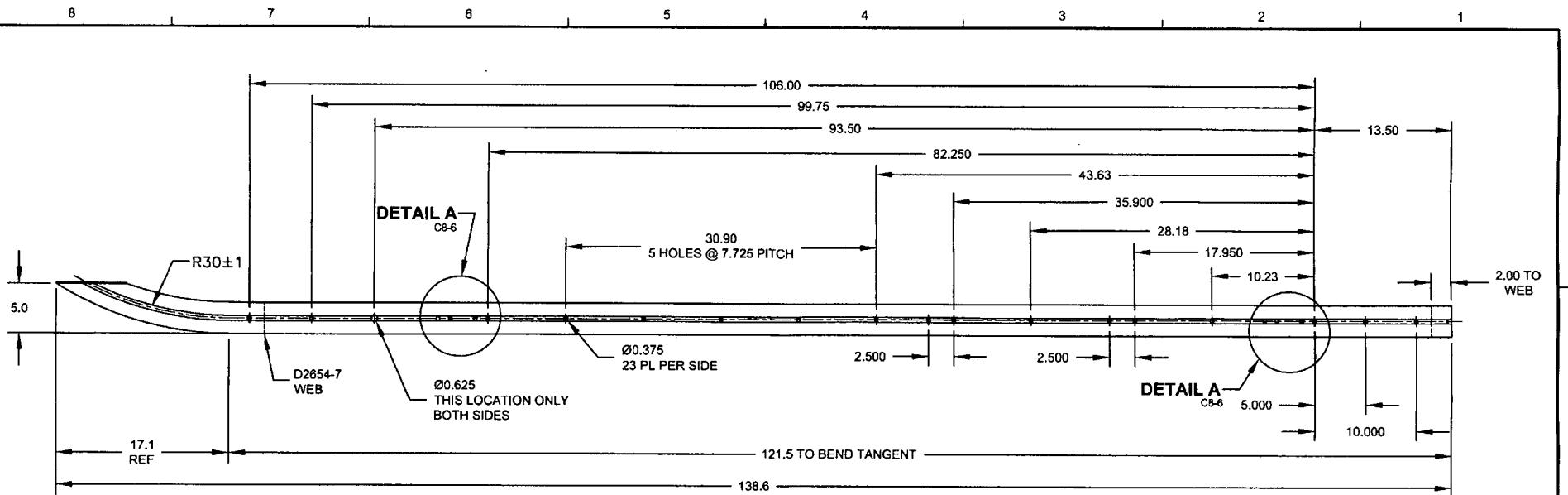
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

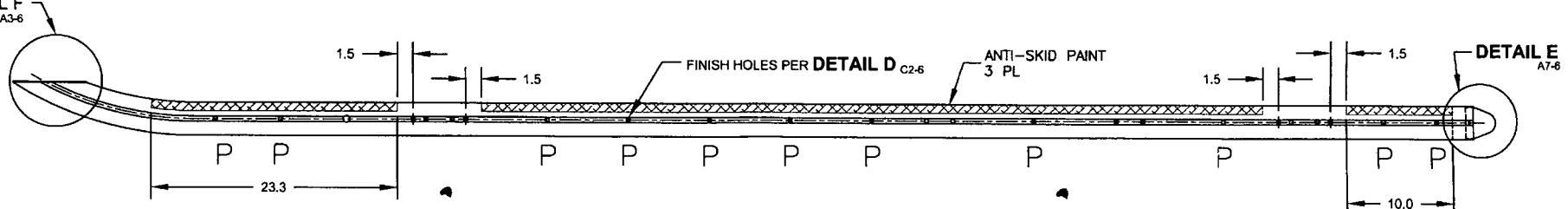
NOTE: Date & initial all entries



D2650-7 BENDING/DRILL DETAIL

W/B 60594

RELEASED
08-07-22 11:11



D2650-7 ASSEMBLY/FINISHING DETAIL

DESIGN	DS	DART AEROSPACE USA, INC	
DRAWN	A/S	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.	<i>PE</i>	D2650	SHEET 5 OF 6
APPROVED	<i>NO</i>	TITLE	SCALE
DE APPR.	<i>NO</i>	206/407 SKIDTUBE ASSEMBLIES	NTS
DATE	08.08.08	COPYRIGHT © 1997 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL. IT MUST BE KEPT IN A SECURE CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE USA, INC.	

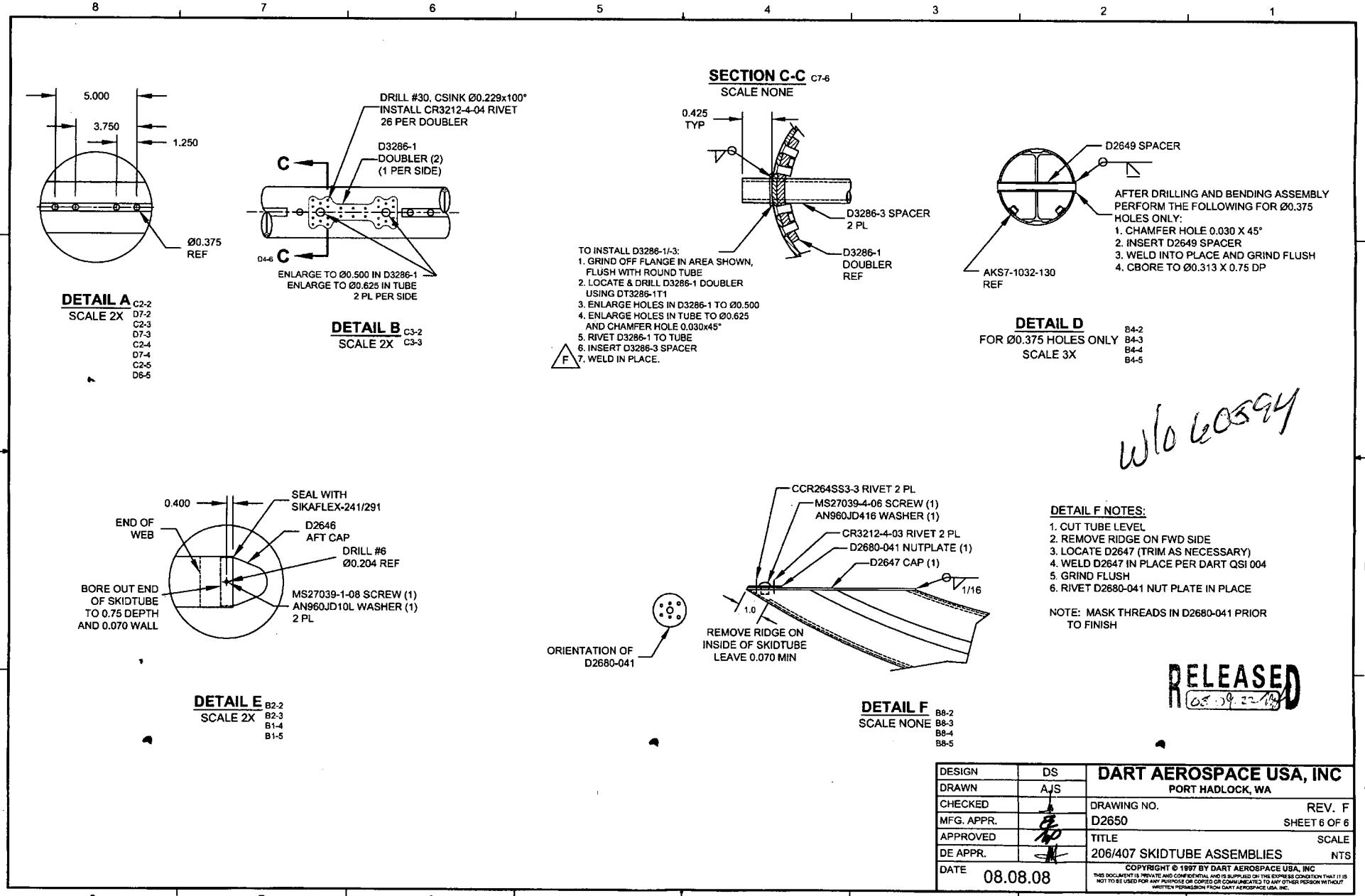
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



RELEASE
05-09-22-10

DESIGN	DS	DART AEROSPACE USA, INC		
DRAWN	AJS	PORT HADLOCK, WA		
CHECKED		DRAWING NO.	REV. F	
MFG. APPR.	<i>BS</i>	D2650	SHEET 6 OF 6	
APPROVED	<i>BS</i>	TITLE	SCALE	
DE APPR.	<i>BS</i>	206/407 SKIDTUBE ASSEMBLIES	NTS	
DATE	08.08.08			

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

NO. 235

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Ellsott
Job number: 59780
Part number: D20w-642-541
Description: 20ga skid tube
Welding Process: Tig Mig []
Base material: Aluminium
Current: AC DC []

TEST REQUIREMENTS AND RESULTS

Visual: pass fail
Penetration: pass fail

UNACCEPTABLE

Cracks: pass fail
Undercut: pass fail
Pin holes: pass fail
Overlap (cold lap): pass fail
Porosity (surface): pass fail
Coloration: pass fail

Qualifier J. D. E. Date of Test Coupon 10.07.01

Welder Barclay Ellsott Date of Test Coupon 10.07.01

The above named individual is qualified in accordance with AWS D17.1.2001 to weld